EXHIBIT B #18

Referring to the Enclosed Attachments

It is noted that these Attachments are included to provide background examples, relevant information regarding the terminology and designations utilized in the application of the present invention and visual evidence with comparative regard towards the various prior art references that have been cited by the examiner; and to point out the specific misreading of the references by the examiner.

It is noted that the present invention was favorably reviewed by the Office, without the addition, augmentation, or benefit of these Attachments, in the PCT International Search Report (PCT/US97/18028), dated March 18, 1998; and also in the PCT International Preliminary Examination Report, dated June 15, 1998.

In addition, it is noted that the following Attachments are numbered in a continuation of sequence with the previous Attachments included with the Response submitted on January 8, 2001; accordingly, they begin here with Attachment XII, respectively.

These following Attachments will set forth, for the record, specific responses to the various prior art references set forth by the examiner, Jennifer E. Winstedt, in the Detailed Action mailed on April 4, 2001.

The Attachments will also refer to the previous Detailed Action, mailed on September 7, 2000, as set forth by the examiner, Jennifer E. Winstedt, in regard to previously cited references.

To aid in clarification, the previous Detailed Action of September 7, 2000 will be referred to as the **1st Detailed Action**, and the Detailed Action of April 4, 2001, will be referred to as the **2nd Detailed Action**. The numbered sections of said Detailed Actions, i.e., the points of rejection as set forth by the examiner, will be referred to as No.or Nos. The rejections will be responded to in the order in which they were initiated by the examiner, unless, as a courtesy for the sake of clarity, there is a more appropriate sequence of response.

Also for the courtesy of clarification, the applicant's Response of January 8, 2001, will be referred to as the **1st Response**.

In reference to said 1st Response, a word-processing error was made on page12, line 17, which begins with: [lines 55-75, Rochwite utilizes two *bar members,*] ; the line numbers should be 1-8 (of column 4).

When and where it is considered appropriate, the Attachments will address certain remarks as set forth in the examiner's Response to Arguments on Page17 of the 2nd Detailed Action.

Attachment XII Re: Claim Rejections of Nos.1-4, 2nd Detailed Action

No additional material is included with this Attachment.

Regarding the Claim Rejections as cited in the 2nd Detailed Action, pages 2, 3, and to line10 of page 4, regarding the mistakes in the numbering of the dependent claims 34, 35, and 36 (Nos. 1 & 2, page 2 of the 2nd Detailed Action) and the mistakes regarding insufficient antecedent basis (Nos. 3 & 4, page 2-4 of the 2nd Detailed Action) in the writing of claims 22-42 have been corrected.

It should be understood that removing the terms "the user" and "can", etc., altered the flow and structure of the sentences of the claims which then required some rewriting to enable a clear meaning to be conveyed in the sentences. The claims are now fairly clear and relate more accurately to the disclosed and designating material of the present invention, including the Background and Summary of the Invention, the Description of the Invention, and the Figures with their Descriptions.

Attachment XIII Re: Claim Rejections of No.6, 2nd Detailed Action:

the Prior Art of Bierstadt (U.S. Patent 174,893)

Re: in response to the examiner's citing of *Nerwin v. Erlichman.*

No visual material is included with this Attachment, however, some visual Figures are referred to and examination of these Figures is respectfully requested.

On page 5, line 1 of the 2nd Detailed Action, the examiner is self-contradictory when stating that Bierstadt **discloses** a content support portion configured to position and support **immersive content**;

and then on said same page 5, line 15, the examiner states that Bierstadt **does not disclose** a content support portion being able to convey, when the content support portion occupies a full field of view of the viewer when the viewer is at a position of focalization, content which is configured to convey four visual fields, including a left peripheral monocular field, a left binocular stereo field, a right binocular stereo field, and a right peripheral monocular field, respectively;

The contradiction is that the paragraph above describes the functional designations of the term "immersive content" that the content support portion is required to be proportioned to position and support in Claim 22 of the present invention.

It seems the examiner has failed to consider or acknowledge the meaning of the term "immersive" or "immersive content" or "immersive visual field" as extensively designated in the Specification (see Description of the Invention, Stereoscopic Viewer, page 3, lines14-20) of the present invention, and as was also extensively referenced, as a courtesy, in Attachment I of the 1st Response.

Regarding previously written Claim 17 of the present invention, in the1st Detailed Action, No.8, page 9, line 19 & 20, page 10, lines1&2, the examiner rejected said Claim 17 by incorrectly citing Bierstadt as disclosing content that was configured to convey four perceptual fields in a visual field of view as designated in said Claim 17 and the Specification of the present invention.

The examiner misread the Bierstadt art, and in the1st Detailed Action, mis-attributed said content configuration to the Bierstadt art. The examiner set forth this misread and mis-attributed art as the basis for the rejection of claim 17. The examiner was incorrect then and is still incorrect in the 2nd Detailed Action, in regard to misreading the functional capabilities of the Bierstadt art and what it teaches.

The fact is (as was demonstrated in Attachments I-IX of the 1st Response) that Bierstadt **does not disclose** or teach a content support portion that is proportioned to convey immersive content as designated by the Specification and required in Claim 22 of the present invention.

Bierstadt claims "substantially as described" and in Figures1 & 2 discloses a "front cover" proportioned to optically convey a **standard sized**, 19th Century stereograph, taken with the **standard** camera equipment of the era, with a total image area of 3 inches in height and 6 inches in width. That is all.

In No.6, page 5, lines 11-15 of the 2nd Detailed Action, the examiner states that Bierstadt discloses a pivotal chassis that enables the viewer to be movable in a plane that is parallel to a plane common to the surface of the content, and that it can **scan and traverse up and down a length of content while maintaining focus of said content**, as required in Claim 22 and as designated in the Specification of the present invention.

It is noted here that a **specific** size designation of the content is not specified in Claim 22 or anywhere in the Specification of the present invention; and that various content surfaces with **varying lengths** are indicated in the Figures. The term "full field of view" refers to the horizontal span -width- of the total visual field (which is composed of three blended fields) as seen through the viewer at one time, and its specific size is also not designated as it was anticipated that advances in optics and also widening of the content may enable the width of said field to become wider. The functional capability of scanning up and down the content is **clearly designated** in the written Specification (see Chassis Pivotal Geometries , page 3, line 27- page 5, line 10) and visually indicated in Figures 22, 24, and 26, with respective arrows 34, 35, and 36.

The generally accepted definition of the term "scanning" or "visual scanning"and the specifically designated term for "visual scanning" in the Specification of the present invention are the same in the basic aspect that **visual scanning** -in this instance, moving the viewer up and down while maintaining focus as designated- **is required if the size of the subject being viewed is larger** - in this instance, the content surface, lengthwise from top to bottom, as designated- **than what can be entirely seen with the viewer at one time.**

This functional aspect of scanning is **well known** and seen in copy machines, digital scanners and medical scanning equipment of all kinds, etc.

The pivotal chassis of Claim 22 is configured to enable this extensively designated visual scanning function in the present invention.

The pivoting flap structure disclosed by Bierstadt enables the disclosed viewer to optically convey a standard sized stereograph positioned in front of and towards said viewer on the inside of the designated "front cover".

Bierstadt does not disclose or teach the functional capability of scanning as being required in any instance to view said stereograph.

Bierstadt discloses that the stereograph is proportioned to be viewed with said means of flaps and viewer in its **entirety** at one time **without** scanning. That is all.

Regarding *Nerwin v. Erlichman*, which is cited by the examiner (No. 6, page 7, lines 15-21, page 8, lines 1-5 of the 2nd Detailed Action) in view of **Bierstadt**, Kono, and Huber et al.; as a basis to reject Claim 29 of the present invention, whereby the examiner states that the clipboard-type configuration in Claim 29, which reads:

> "the configuration of the content support portion to provide a rigid, generally planar surface to position, support in a generally common plane and releasably attach, in a manner similar to a clipboard, at least one surface of one page provided with said content, to enable said content to be positioned to be optically conveyed and visually scanned with the viewer while maintaining focus." ;

is somehow pertinent to the front cover page support of Bierstadt and *also to*:

> "It has been held that constructing a formerly integral structure in various elements involves only routine skill in the art." *(Nerwin v. Erlichman*, 168 USPQ, 179)

The applicant fails to understand the examiner's logic as to how the a page-positioning and securing clip configured with a rigid content support portion can be considered to be relevant in regard to this finding, or how the structure of the device of Bierstadt teaches anything relevant regarding this finding, or how that may relate to Claim 22 or 29 of the present invention.

Perhaps the finding and Bierstadt would be *hypothetically* relevant to Claim 29 if Bierstadt disclosed and taught the configuration of a page clip that was integrally configured with a rigid content support portion, and the present invention then claimed a rigid content support portion with a detachably separate clip, but that's certainly not the case at hand.

In addition, as demonstrated herein, and as required by Claim 22, Bierstadt doesn't teach the use of a pivotal chassis that is configured for scanning content as designated in the Specification of the present invention, i.e., content that is longer in length than what can entirely be seen at one time with the viewer; and Bierstadt doesn't teach the configuration of a content support portion that is proportioned to position and support immersive content as designated in the Specification of the present invention.

Moreover, Bierstadt does not teach anything of any relevance, practical consideration or significance, in regard to the present invention.

This above statement should not be mis-construed as an **"attack"** on the prior art reference of Bierstadt; it is merely a statement of objective fact. In fact, the applicant respects the achievement of Bierstadt (and much of the prior art of record) and thinks the Bierstadt device, when placed the context of the era it was created in, is a nice little stereographic book.

In counter-response to the examiner setting forth (see Response to Arguments, No.17, page 17, lines 5-8 of the 2nd Detailed Action) the finding and relevant cases pertaining to:

> "One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references."
>
> See *In re Keller*, 642 F .2D 413, 208 USPQ 871 (CCPA 1981);
>
> *In re Merck & Co.*, 800 F .2d 1091, 231 USPQ 345 (Fed . Cir. 1986)

The applicant is not attacking the individual references in anyway whatsoever; the applicant is simply correcting the misreading of the references by the examiner, and demonstrating, with a careful and objective reading of the references, and the presenting of the results from said reading of said references herein - for the record - that the cited references have no actual relevance to the present invention; that the examiner has misread the references and attributed functional capabilities, features, and aspects to the references that do not exist; and that by said misreading, and said subsequent mis-attribution of said functional capabilities, the examiner has incorrectly set forth the references in combination with each other to construct a case based on obviousness, to reject the claims of the present invention.

It can be simply stated:

One should not misread prior art references and attribute features, functional capabilities, elements, geometric underpinnings and alignments, that do not exist in said references.

One should not set forth misread references with mis-attributed, non-existent functional capabilities as being relevant to the actual functional capabilities of the present invention.

One should not use said misread, mis-attributed references in combination as a basis for rejection.

One cannot show obviousness over the actual functional capabilities of the present invention with misread references that are attributed with functional capabilities that are non-existent in said references.

Such references and combinations of such references are irrelevant.

Regarding the cases cited by the examiner, *In re Keller, Terry, and Davies*, and *In re Merck & Co.*, These cases are irrelevant to the case at hand, for they do not include in their purview any instance of the examiner misreading the prior art references, or setting said misread references forth in combination with **multiple** misread references.

In counter-response to the examiner's remarks in the Response to Arguments, page 17, No.17, line 3 and 4, of the 2nd Detailed Action:

> "Applicants arguments filed 1/16/01 have been fully considered but they are not persuasive."

The applicant is well aware of the extent of full consideration exhibited by the examiner, and the examiner's full consideration is readily apparent in the examiner's own Actions, including the Election/Restriction mailed on 3/22/00, and the herein designated 1st and 2nd Detailed Actions.

The examiner's initiated Actions and full consideration regarding the responding arguments by the applicant are a matter of record.

It seems the examiner fails to understand that the arguments of the 1st Response and this Response are not provided to persuade the examiner.

They are provided for the record.

The applicant does not rely on persuasion.

The applicant relies on fact.

Attachments XIV - XVIII Re: Claim Rejections of No.6, 2nd Detailed Action: the Prior Art of Kono (JP63-8624).

The Attachments XIV - XVIII are visual examples with textual captions and references. They are necessary material to this part of the Response regarding the examiner's citing of the prior art of Kono.

For the sake of clarity, it is advised for those reviewing the Response to please view the visual material of Attachments XIV- XVIII in the collated order they are presented, and to read the textual information accompanying said visual material, as it will be helpful in the familiarization of the terms also utilized in the Response regarding the examiner's citing of the Kono prior art reference, which will follow said visual/textual Attachments.

This procedure will also be useful when reviewing the other visual/textual Attachments included herein the Response in regard to the other prior art references cited by the examiner.

In some instances, the visual Attachments and the pertinent textual information that has been included with them on the same pages will basically constitute the specific response to the examiner's citing of a particular prior art reference and will require very little, if any, elaboration beyond what is presented with the visual pages. In such an instance, the numbered visual/textual Attachment/s will simply be inserted within these pages in collated order, and for the sake of clarity and flow of continuity, will be appropriately noted .

Visual/Textual Attachments Regarding the Examiner's Citing of the Prior Art of Kono

Included herewith is Attachment XIV, an actual-size functional example of the Kono Wide-Angle Image Format for free viewing.

Attachment XV provides a simulated view of the image of Attachment XIV after fusion, as a courtesy for those who may not be able to free view said image.

Attachment XVI is an actual-size example of the Immersive Image Page Format as utilized in the present invention.

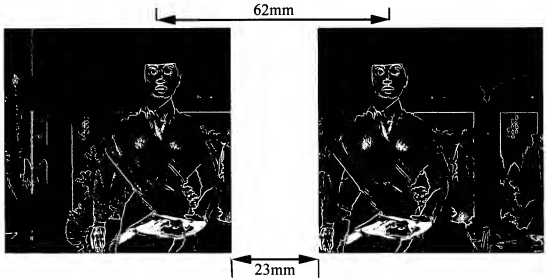
Attachment XVII is a simulation of the immersive image format of the present invention after fusion.

Attachment XVIII is simple way to visually compare the three image formats: the present invention, the Kono format, and the typical stereograph format of the 19th Century. All three formats are compatibly sized and utilize the same visual content for an easy and fair comparison of the visual field configurations and proportions.

Attachment XIX is an after fusion simulation provided for those who may not be able to free view Attachment XVIII.

Attachment XIV Example of the Kono Wide-Angle Image Format (Re: Claim Rejections of No.6, 2nd Detailed Action)

This image is produced to the specific dimensions required and designated by the Kono patent; it is based on the usage of 120mm Medium Format film as designated (Kono, JP63-8624, page (3)-119-, column 1, line 26). The image can be "free viewed" i.e., viewed free of the use of a viewer, directly from this page.



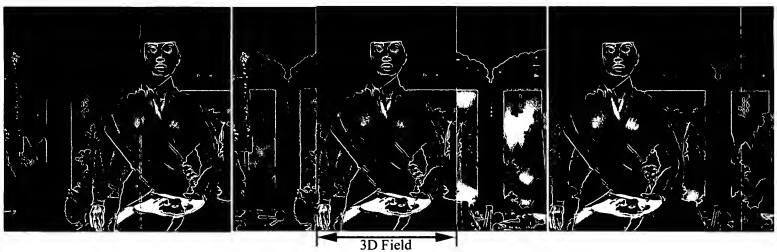
Upon fusion, one will see **five** fields: a central stereo field flanked by left and right monocular fields, and two outer fields typical of the "Three Picture Effect". Note that each of the fields is divided by a sharp line and that the three central fields do not merge and blend together seamlessly, and cannot be made to do so. As shown here, it is evident that the monocular fields do not occupy a peripheral visual position.

One will also observe that the left and right monocular fields are very unsteady and waver in and out of visibility, and that the proportional area of the central stereo field is very narrow. These problems are inherently derived from the placement of the 23mm gap between the left and right stereo images.

The 23mm gap and the 62mm picture center dimension are specified in the text (Kono, JP63-8624, page(3)-119-, column1, lines 30,31,37,38; column 2, lines 31,32) and drawings (See Kono, JP63-8624, Fig. 6: "B = 62mm", Fig.8: "62mm, 23mm") of the Kono patent; and are absolutely necessary to enable the Kono method to function. The gap provides a clear space for the two monocular fields to be viewed together with the central 3D field. The placement of said gap and proportion of the stereo and monocular fields does not teach an obvious use of or combination with a viewer with adjustable lenses and adjustable occluding apertures. The Kono method exclusivly teaches the specific use of the 23mm gap and said field proportions to achieve quite the opposite, a format that can be free viewed or viewed with a standard magnifing viewer with no occluding apertures, but with a sacrifice of image quality, as can be seen here.

Attachment XV After Fusion: The Kono Stereo Image Format (Re: No.6)

For those who find it difficult (or impossible) to successfully fuse and perceive the example provided with Attachment XIV, here is an accurate simulation of the Kono stereo image format as seen after fusion. It should be understood that the central image field (See arrows) would be in 3D, and that this simulation does not convey the 3D aspect, but is useful for indicating the configuration and proportions of the fields of the Kono image format after fusion.



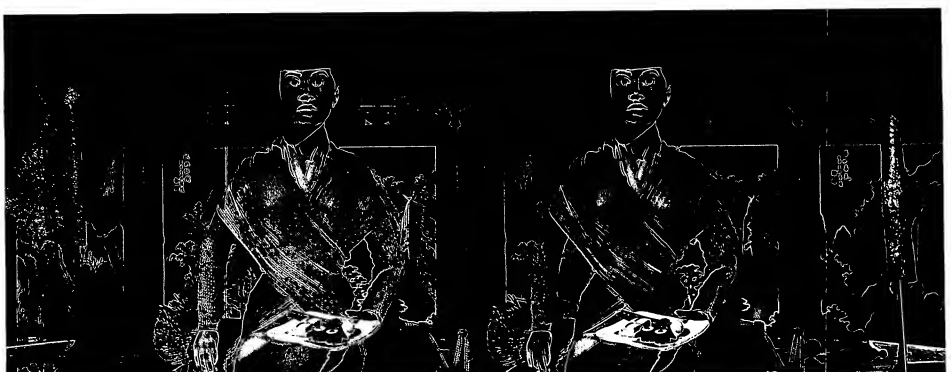
One will notice that the proportions of the Kono central 3D field are very narrow, and that the monocular fields are lighter in tone than the central 3D field and they also tend to pulse and fluctuate when actually viewed. Note the distinct sharp line which divides the central 3D and monocular fields, i.e., the fields do not blend seamlessly. Note that the outer residual images due to the "Three Picture Effect" occupy the most peripheral visual positions, not the monocular fields. All of these problems hinder the quality of this image format. As shown here, this is not an immersive image format.

The 23mm gap is the reason the Kono method works, but it is also the reason for the stated problems. The 23mm gap deprives the central stereo field of 23mm of fusable optical space, i.e., the specific designated constraints of 62mm for the spacing of the stereo image center points (Kono, JP63-8624, page (5)-121-, Figure 8, Page (3)-119-,column 2, lines 28-32) determines the size of the central stereo field. Without the gap, the stereo field would be 62mm wide. With the gap, which allots clear optical space for the monocular fields, the central 3D field becomes only 39mm wide.

The monocular fields are lighter than the central 3D field because one's vision is fusing the monocular fields but also the white page space of the 23mm gap, since there are no adjustable occluding apertures to occlude this extra light. This tonal disparity causes the sharp dividing line between the central 3D and monocular fields, and also because the sharp edges of 23mm gap are in the same focal plane as the image.

Attachment XVI Actual Size of Immersive Image Page Format of the Present Invention (Re: No.6)

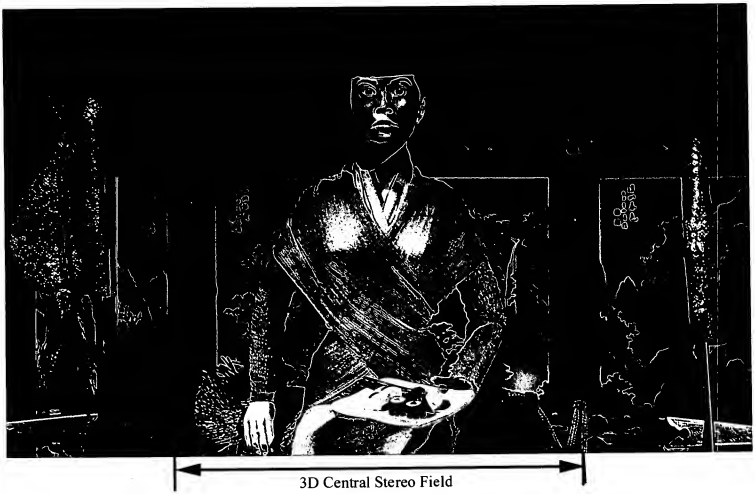
Shown here at actual size is an example of the latest Immersive Image page format for the present invention. The same subject matter is used, to enable comparisons of these image fields to be made with the image fields of the Kono wide-angle format, which is also shown at actual size.



Please note that this image format is not designed to be free viewed. It is configured to be viewed with the means of the present invention only, which utilizes the prism capablities of the optics to enable perception of **stereo image fields with image centers beyond the 62mm distance of the average interpupillary distance. Note that there is no 23mm gap between the left and right images.** These two stated factors enable this format, when used in concert with the means of the present invention, to convey a truly immersive visual image field that simulates human vision.

Attachment XVII Simulation of the Immersive Image Format of the Present Invention After Fusion (Re: No.6)

Please note that this is a simulation that only shows the relative proportions of the left and right peripheral monocular fields to the central stereo field, and that the central stereo field cannot be seen in 3D here. The means of the present invention are required to enable an actual immersive image content to be seen. However, this is useful for comparison purposes...



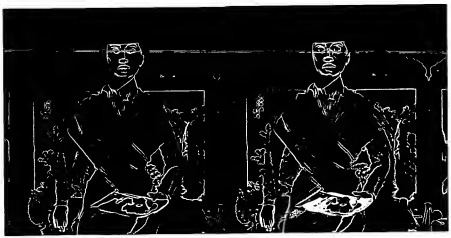
Upon comparison of this immersive image field to the Kono wide-angle field, **one will note three substantial differences: Factor one:** The proportion of the central stereo field in relation to the left and right peripheral monocular fields is much wider. **Factor two:** there is no fluctuation or tonal disparity between the three fields; they blend seamlessly together to form a single immersive field. **Factor three:** this image field, when seen with the means of the present invention, provides a very large, immersive field of view, where the peripheral fields actually occupy the peripheral areas of one's vision.

Attachment XVIII Before [redacted]ion: The Three Image Formats Sized f[redacted]Free Viewing (Re: No.6)

Perhaps the most simple and elegant way to see the distinctive differences between the three image formats is to free view all three together, with the exact same content, so an accurate comparison can easily be made. Please note that the top image format shown here of the present invention, **is greatly reduced from its actual size that would be used in the present invention** (see Attachment XVI for the actual size of the format), **and that the format is not designed to be free viewed, but only to be viewed with the means of the present invention.**

The middle image format provided here is the Kono wide-angle format, and it is stressed **that it is shown here at actual size,** as it is designed to be free viewed, with the centers of the stereo images set at 62mm, and the 23mm gap used to provide an optical space for the left and right side monocular fields to exist next to the central 3D field.

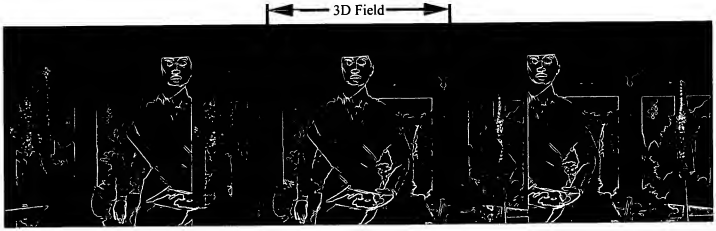
The bottom image format shown here is the traditional 19th Century stereograph format. It has been reduced slightly to make it easier to free view. There are no unexpected results here, just the typical "Three Picture Effect".



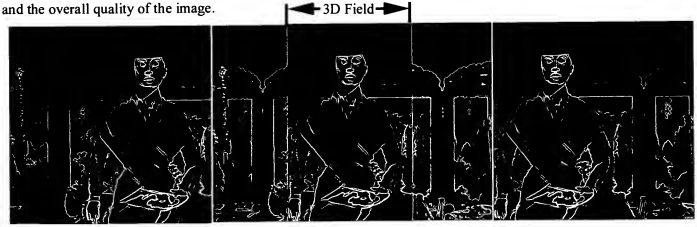
Attachment XIX After Fusion: Distinctions Between the Three Image Formats (Re: No.6)

Here is an after fusion simulation of the three image formats, all of which have been reduced to fit on this page, so they may be easily compared by those who may find free viewing difficult.

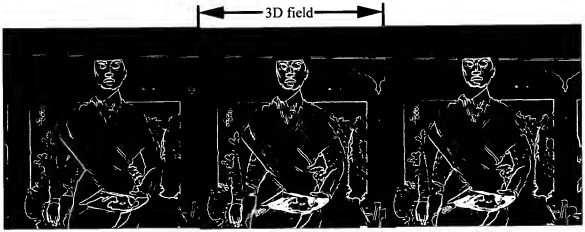
At the top is the immersive image format of the present invention. Remember that it is not designed to for free viewing, although the central field would still appear in 3D in this instance; however, as shown here, the peripheral fields overlap the residual fields and cause a "double exposure" on each side of the central 3D field. This problem is eliminated when the image format is properly viewed with the means of the present invention.



Next, in the middle, is the Kono wide-angle image format:
Note that the Kono format is designed to be free viewed, and that the 23mm gap enables the side fields to exist next to the central 3D field, to create a more wide-angle picture proportion, but with a sacrifice to the width of the 3D field, and the overall quality of the image.



The bottom example is the traditional stereograph format, which produces the "Three Picture Effect".



In Further Regard to the Examiner's Citing of the Prior Art of Kono

A summary of the Kono method as described in the text and Figures of the Kono patent is as follows:

The Kono patent begins by very specifically describing an economical method for taking wide-angle *two-dimensional* images with a conventional Medium Format (120mm) camera, whereby two sheets of photos taken with a conventional camera lens (not an expensive wide-angle lens) can be free viewed together to form a wide-angle *two-dimensional* image.

This method of arranging and viewing the two sheets of photos is shown very simply in Figures 1 and 2, but the residual images of the "Three Picture Effect" are not shown for purposes of clarity, as the Figures 1 and 2 are stressing an introductory, conceptual illustration of the wide-angle proportion of the Kono image format.

Please note that In Figure 1, The gap between the left and right pictures is clearly indicated.

Figures 1 and 2 are initially utilized to illustrate the text which tells of the viewing method for *two-dimensional* wide-angle images, which is explained on page (2)-118-, column 2, lines 36-40 of the Kono patent.

Figure 3 shows the method for *taking the photos* for these *two- dimensional wide-angle images.* The caption with Number 5 of Figure 3 indicates that it is a strip of film as it moves through the camera in time. The right frame (7) is taken (exposed) first, then the film is advanced and the left frame (7a) is taken next, as the film is rolled or advanced through the camera left-to-right. If properly examined by one who is skilled in the art, it is readily apparent that Figures 3, 4, 6, and 7 specifically portray strips of film with frames of exposures being indicated.

The "floating" lenses (3,3a) of Figures 3 and 4 are actually the **same** camera lens at **different points in time**. This "floating lens" is utilized as a symbolic motif and it is very Japanese to utilize a cartoon-like symbol such as this...

In the Japanese text of the application, the "floating lens" is referred to as the "camera lens view position" (see the Japanese captions accompanying 3 and 3a, of Figures 3 and 4, and also12 and12a of Figure 8 of the Kono patent).

Figure 3 is showing how to shift the line of sight (4 and 4a of Figure 3) or the "camera lens view position" of a conventional camera (without a wide-angle lens) to take two pictures **separately in time** so that after the pictures are developed and printed as two separate sheets of photographs, they may be positioned using the Kono method and seen and then viewed as a **wide-angle** *two-dimensional* picture.

On page (3)-119, column 1, lines 1- 18, Kono refers back to Figures 1 and 2, and uses them to introduce the method for taking and viewing wide-angle photos in **stereo**, by adding a foreground reference method to the camera-shifting technique.

Although the Figures 1 and 2 do at this point refer to stereo, the examiner is, however, incorrect, and has misread the Figures 1 and 2, and has attributed (see No.6, page 6, lines 12-22, page 7, lines 1-5 of the 2nd Detailed Action) functional capabilities to said Figures that are not disclosed in said Figures, or in the text referring to said figures.

Figures 1 and 2 *do not* disclose or teach the utilization of **peripheral** monocular fields interposed by a central stereo field; the "*left and right parts*" (Kono, Figure 2, captions 2a and 2, respectively) as disclosed *are* monocular, and they *are* interposed by a central stereo field, which is enabled by the 23mm gap designated between the left and right photos, but they **do not disclose or teach** the functional capability of creating or utilizing true **peripheral** monocular fields with a stereo field to create and convey an **immersive** image field which occupies a full field of view, as designated in the present invention.

Figures 1 and 2 disclose and teach a method to create and view *wide-angle* stereo photos, and as shown and demonstrated herein, the resulting image format is substantially different from the designated immersive image format of the present invention, **in two key aspects:** the functional method the images are proportioned and arranged **before** fusion (Kono's use of 62mm image centers and the 23mm gap is totally different, indeed opposite from, the present invention's designated use of abutted image fields...) and the functional **visual** result of that arrangement **after** fusion, which produces and conveys substantially different perceptual image fields, i.e., the Kono method produces a wide-angle image; whereas the present invention produces an immersive image as designated.

Figure 4 is similar to Figure 3, but it describes the method of shifting the camera to attain a 3D pair of wide-angle stereo photos by using a reference point (referred to as a "point of light" in the Japanese text) in the foreground of the scene being viewed, below the horizontal center of the camera's viewfinder, to measure the distance of the shift in relation to the center mark in the camera's viewfinder (page (3)-119-, column 1, lines19 and 20 of the Kono patent). This foreground downward shift distance is indicated as " C " in Figure 4, and is also specifically given a 10mm distance designation in Figure 7.

The examiner has misread Figure 4 and attributes features and capabilities to Figure 4 that are not disclosed. The lenses (3, 3a) portrayed in Figure 4 **are not** those of a stereoscopic viewer, and the image frames 6 and 6a **are not** positioned to be viewed stereoscopically (they are frames of film being *exposed* in a camera.) as the examiner sets forth (see 2nd Detailed Action, No.6, page 6, lines 12-16). This is easy to visually discern in Figure 4, as there are the usual drafted "curving lines" on each end of the film-strip which traditionally indicate that the strip is "cut" for clarity, so it will fit in the drawing, and that the strip of film actually continues...

The major disadvantage of this photo shooting technique is that only pictures of still subjects, landscapes and such, can be taken, since the left and right pictures which will constitute the stereo pair are being taken through a single viewpoint lens system which must take one viewpoint and then be shifted and adjusted to take the second viewpoint. *The shift takes time.* (One must use a true stereo camera with two lenses firing in concert together to capture action shots of subjects in motion... By the way, the stereo cameras designed to photograph *immersive* image content for the designated image format of the present invention are configured optically to *also* photograph true left and right peripheral fields simultaneously in addition to the usual left and right binocular stereo fields.)

Camera-shifting techniques are well known in the art, but the Kono method can be considered new because it does attempt to utilize a conventional camera to take wide-angle and stereo photos and then describes a method for viewing the photos by utilizing the exact dimensional sizes specified in the patent for mounting and displaying the photos.

Unfortunately, the Kono method of taking photos is rather complex to do out in the real world, and the quality of the resulting images is not very good, which may account for the obscurity and failure of the Kono method to catch on in Japan. A search on the Internet for images utilizing the Kono method and format did not provide any examples. None could be found. This was somewhat surprising, because free viewing stereographic images is a popular activity in Japan, as a search on the World Wide Web will confirm.

As detailed and visually demonstrated in Attachments XIV, XV, XVIII & XIX, the Kono method does create a wide-angle image field which differs from that of the normally squarish-shaped format of past stereographs, and it uses the addition of left and right monocular fields to do this, which are provided with a 23mm gap of clear optical space between the left and right stereo images in order to enable the monocular fields to be optically juxtaposed next to the left and right stereo images after fusion.

It is also noted and visually demonstrated in said Attachments, that the placement of the 23mm gap between the left and right stereo images (which are positioned with their optical centers at 62mm, as designated by Kono) **greatly reduces the actual proportional width of the perceived stereo field as related to the side monocular fields.**

This important aspect of the **consequences** of placing a gap between the left and right stereo images (at the expense of optical space that could be utilized for fusion of the central stereo field) was discovered by the applicant independently, without any knowledge of the Kono method.

The applicant independently determined that the procedure of positioning a gap between the left and right stereo images was **totally unsuitable** for creating a stereographic format that provides a truly immersive visual field that simulates human vision, which includes a large central stereo field and left and right monocular fields that truly are **peripheral**.
(see Figures 8 and 9 of the present invention, and the referenced designations of Attachment I in the 1st Response)

It is duly noted that the applicant indeed wrote of this very aspect of "the gap problem" in the Detailed Descriptions of the Drawings of the present invention:

> " It is annotated that the primary objective of abutting stereofields 2L and 2R is to achieve perception of the largest stereofield possible. If a wide central border were interposed between 2L and 2R, said border would occupy space that can be utilized by the stereographic content and decrease and narrow the perceived stereofield, thus the objective of attaining an immersive visual field would be diminished."
>
> - (page 10, lines 6-10 of the present invention)

It is noted that in all the designating Figures of the present invention which show the areas for placement of content, the left and right stereofields are indicated as being abutted together with the use of a single drawn line. No gap is ever shown between the left and right stereofields. (see Figures 1, 2, 6-8, 10, 13-18, 21-24, 26 and 39 of the present invention)

It should be understood that while the Kono method seeks make an image field with a wide-angle proportion by adding monocular fields, it does so by utilizing the 23mm gap, at the **cost** of **narrowing** the central stereo field, and thus, the resulting image as perceived after fusion, is really not much wider *in true size* than a traditionally formatted stereographic image.

In terms of **interior** image field proportions, i.e., how the proportions of the interior fields relate to each other and how this determines the overall image field, it is this narrowing of the central stereo field which prevents the Kono format from being proportionally immersive.

It should be quite apparent after looking at the example provided for free viewing in Attachment XIV, (or Attachment XV if all else fails) that the fused image is not immersive, that the monocular fields are not peripheral in anyway, especially considering that **they are flanked on the outer left and right by the residual images of the "Three Picture Effect".**

In fact, all of the **five** visual fields seen after fusion of the image of said Attachments are seen in the central stereo fusion area of one's visual field. None of these images are seen in the left and right peripheral areas outside of the central stereo fusion area.

Kono does disclose the use of a "magnifying viewer" which is mentioned initially in the introduction of the patent (page (2)-118, column 1, line 4, the Kono patent) in the context of viewing film transparencies; and which is disclosed in detail in Figures 5-9, and in the text, starting on page (3)-119, column 1, at line 21, through page(4)-120, column 1, line 10 of the Kono patent, which also details the exact dimensional designations and photo mounting details of the Kono method.

The viewer is disclosed as "magnifying" and does not have any means of interoccular adjustment or adjustable occluding apertures. Basically, it is disclosed as being able to view the format disclosed, which is a stereographic slide frame configured to mount two frames of 120mm film transparencies as designated in Figures 5, 8 and 9, with 62mm stereo centers and a 23mm gap as shown. Number 8 and 8a of Figure 9 and number 8 of Figure 9 (which is a side view of Figure 8) discloses double convex lenses, which makes sense, if one who is skilled considers the proportions of 120mm film (an exposed frame of 120mm film is 60mm square) and the mounting dimensions and utilization of the 23mm gap of the Kono method, it should be understood that the use of prism, convex/concave, or wedge-type optics are unsuitable -actually impossible- for this format.

The viewing of these type of backlit 120mm transparencies still inherits the intrinsic problems of the Kono method, as shown herein, with one additional problem that is unique to transparencies, and occurs when they are backlit or projected, and this problem is well known in the art, and has its own term, (in America) which is *Shadow Bands* or *Bands* for short.

The applicant includes herewith a few photocopied pages from the book, "Make Your Own Stereo Pictures" which discloses the traditional meaning of and problems which cause *Bands*, as supporting documentation. The text is highlighted for easy reading.

Basically, *Bands* occur in backlit and/or projected transparencies when the outer extremities of the left and right stereo images contain visual material that is not contained in both images. In other words, the left and right monocular wide-angle fields of the Kono method, which contains material which does not overlap and fuse with the central field, **inherently** creates *Bands*. Kono fails to teach any solution for this problem.

The use of backlit transparencies, and the attendant problems and required configurations necessary to view them, are not in the purview of the present invention, which is configured to view reflective, or front-lit content, not back-lit transparencies.

the ones wearing light shades of clothing will not steal the picture from those more soberly garbed. Also, the three-dimensional quality is enhanced when the spectator's eyes are able to travel from front to rear of the picture without being arrested by one of the subjects whose height, size or other characteristics should have relegated him to the background.

COMPOSITIONAL RULES FOR STEREO ONLY

Finally, let us consider a few rules applicable only to stereo. The addition of the third dimension has made necessary a series of strict rules, based on complex optical laws applying to two-eyed vision. These rules are unheard-of in planar, flat photography, but one cannot violate or circumvent them in making stereo pictures without paying the penalty of spoiling the desired effect.

16. Do not include any material which will be out of focus.

Many excellent planar pictures contain material of either foreground or background which has been intentionally thrown out of focus. This produces, in planar photography, a certain emphasis on the subject matter selected as the center of interest. In stereo, however, the spectator wants to see every plane of the picture clearly in order to grasp the realism of the three dimensions, and sharpness is thus essential.

17. Do not permit an object in the foreground to be closer than the minimum distance required by the extent of lens separation.

There is a "40 times rule" which states that the closest any object should be to the camera or cameras is 40 times the distance between the centers of the two lenses. If one single-lens camera is being used and moved between exposures, the distance between "taking-positions" for the two exposures making up the stereo pair is equivalent to lens separation. Also, if the subject, instead of the single-lens camera, is moved, the distance of the subject's movement between exposures is equivalent to that of lens separation; thus, if you take your first picture, then move the object being photographed 2 inches, your camera should be 2 inches times 40—or 80 inches—from the object.

In describing ghost images which may form on the stereo impression when a before-the-lens attachment is used in making stereo pictures, we discussed the apparition called "bands"—a product of taking a picture too close for lens separation. These, as described, were frequently caused by one lens seeing a certain portion of a subject which the other lens couldn't see. When both lenses attained only partial coverage, the picture would be three dimensional, but the outsides would possess bands (with their thickness depending on how excessively close the picture was taken) which would be darker than the rest of the picture, thus spoiling the stereo impression and annoying the spectator.

The depth of pictures made with excessive lens separation is exaggerated. Noses protrude in elephantine manner. Bones such as shoulder blades appear angular and jut out grotesquely. This is particularly true of cameras which have short focal length lenses—which factor also adds to the distortion produced when pictures are made too close for interlens separation. Portraits of persons wearing glasses will give the impression that the stems of the glasses stretch at least two feet to connect the glass frames to the ears! Rather back away a bit from your subject than distort it.

18. Do not "bar the way" into stereo pictures.

The planar rule covered as number 5 advocated relating a picture to a foreground which would fix the picture in space. A vitally important adjunct to that rule for stereo application is never to place any impediment in the way of the spectator which can stop or retard him in projecting himself into the picture. When your audience looks at your pictures, their realism should prompt each person to feel that he could walk right into the scene: enter the foreground, meander down the lane, stroll to the background and enjoy the scene as much as you did when you photographed it. Thus, if you are framing by means of a gate, leave the gate open. If a railing is in the foreground, don't let it run across the picture to bar access, but rather have it *lead into* the scene, to be held onto, as it were, by the spectator while he mentally strolls through the scene from foreground to background. If a pair of hedges frame the foreground, be sure that no part of either hedge closes the clear passage—even if

but most likely that isn't what affects the picture. What we mean by the words "too close" is that the "40 times rule" has been flouted—that the interlens separation was disproportionately wide for the nearness of the subject. The picture will thus be distorted by exaggerated depth, the ghost known as "bands," and will be difficult, if not impossible, for the spectator to fuse.

Overly pronounced depth, resulting from too widely separated lenses, is easy enough to demonstrate. Take a stereo picture of an

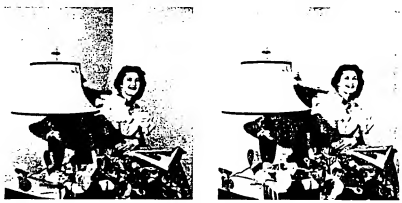


FIG. 27. MATERIAL TOO CLOSE

automobile from the position of one of the tires, which latter portion should be too near for lens separation according to the formula, the "40 times rule." A grain of sand on this tire will stand out like a rock in the picture, while the rest of the car, appearing at a more respectable distance, will have no such spectacular, distorted depth. See Fig. 27.

The ghost, discussed as *bands* in earlier pages, affects those sections at the outer extremities of each frame of the stereo pair which are not covered in both pictures. When seen in the stereoscope or in projection, these outer portions are darker than the other portions of the pictures and cause distortion which robs the stereo impression of its realism. They result from the fact that each of the lenses sees a different *part* of the subject; this is due to excessive spacing of the lenses which, as a result, do not effect proper coverage. Therefore, if we come too near to our subject, the left lens may see his left ear and head but not his right ear, and the right lens may receive the view of his right ear and head but not that of his left ear. Both of his ears, in the resulting stereo impression, will be within the bands—a bad place to be in this instance, for good stereo result.

The last effect, infusability, is by far the worst characteristic of stereo which has been taken too close to the camera for the normal convergence ability of our spectators' eyes when they view the results. What harms the viewer of stereo projection, particularly, is the strain imposed on the eyes when a pair's respective images are too wide to be fused by the spectator with ease.

This last flaw can be called *sting*. If when looking in a stereoscope containing a slide which was made too close for easy fusing, we close one eye, the close subject is seen in one portion of the picture; if we then close that eye and open the other, this same subject seems to leap to the side, occupying a different position in the other picture of the pair. Shutting and opening eyes alternately results in a seeming swing of this material from side to side, like the swing of a pendulum.

Swing can be detected when the stereo pair is inspected in the hand if your eyes are practiced. It is worth learning how to detect, especially if you are producing stereo movies and are not able to use a viewer. Should the right picture of the stereo pair have a close subject near its left border, while the left picture of the pair presents the same subject considerably farther away from its left border, you will know that this subject was taken from too close a distance. If a given point of the subject is, for example, at the left border of the right picture (such as the nose of your model) but near the center of the left picture, the swing of the subject matter is too great for anybody to fuse and causes, in consequence, a terrific strain on the eyes. Similarly, any variation beyond an absolute minimum in placement of the same feature in the two pictures will present an insurmountable viewing problem.

It should also be noted here that the "Lens Adjustment Device Of Stereo Camera", invented by Inaba, U.S. Patent 5,701,532, as cited by the examiner, (The Inaba reference is cited by the examiner for other reasons, and these will be responded to appropriately herein.) is an invented contribution towards solving the problem of *Shadow Bands* in the taking of standard 35mm formatted stereo slides for projection. The Inaba invention is an improvement to a pre-existing, known type of stereo camera, (which utilizes at its core the exact same screw-type interocular adjustment device as utilized by Huber & Leasure, disclosed in U.S. Patent 1,186,786.) in the form of a device that enables the synchronized rotational adjustment of the stop-adjustment rings on the left and right lenses, regardless of their interoccular distance.

Inaba details the problem of what he refers to as "*non-overlap areas*", which is the same problem as *Bands*, with just a different name, in column 1, lines 26-46, of the Inaba patent.

But this said camera (and the improvement by Inaba) would not benefit the Kono method, which is based on **deliberately** utilizing "side fields" or non-overlapping image areas to create a wide-angle image format.

This can also be said of the present invention, which also utilizes "non-overlapping" material, but in a substantially different manner than the Kono method, as extensively and visually demonstrated with said Attachments herein.

The applicant **did try some experiments** with the Kono image format, with the actual-size example produced for inclusion here, to see what the Kono **reflective** image format for free viewing would look like if viewed with magnifing lenses, and even with a prototype viewer with the optics and occluding apertures of the present invention, since said example is a reflective image printed on a page, and intended to be lit from the front, like the images of the present invention.

The results were not good, as the Kono image, with its "locked down" dimensional constraints, is too small to become an immersive image, even when magnified. And in a reflective, front-lit configuration, if one moves the viewer closer or even uses more powerful and closely focusing optics in an attempt to make the content image more immersive, this is also constrained, as the viewer can only get so close to the page surface before it starts blocking out the very light that is lighting the image.

In summary, the Kono method and image format doesn't disclose or teach the creation or conveyance of proportionally immersive image content as disclosed in the present invention.

The Kono wide-angle method and format cannot be configured to convey proportionally immersive content mainly because of the constraints of the 23mm gap, and the 62mm stereofield centers as designated in said patent. The Kono method does not teach in anyway the use or conveyance of stereographic visual fields without said 23mm gap or said 62mm stereofield centers, **nor does the combination of adjustable lenses and occluding apertures transform the Kono image format into an immersive image format similar to the immersive image format as designated by the present invention.**

Even if magnified, the Kono format still fails to provide a proportionally full field of view of immersive content as designated in the Specification and Claims of the present invention.

The Kono method as demonstrated in Attachments XIV, XV, XVII & XIX, does not create an immersive image field in which the left and right monocular fields are truly seen as part of the user's **peripheral** vision. The left and right monocular fields produced with the Kono method are indeed monocular, but **they are not true peripheral fields**. Nor can they be made to be peripheral visual fields, due to the designated mathematical and dimensional **constraints** of the Kono method, which enable it to function within very specific performance limits, but which also prevent it from going beyond those set and specific performance parameters.

As demonstrated visually, the **unavoidable** problem with the Kono format is that the **proportion of the central stereofield is diminished** -because of said gap and center dimensions- and there is no remedy for this constraint, which is at the heart of the matter: **a diminished central stereo field is not an interesting thing to look at, and it negates the entire purpose of creating a stereographic format or device.**

In other words, it is one thing to create a wide-angle image format; but it is quite a different task to create a truly immersive, full-field-of-view image that simulates actual human vision.

The examiner has misread the prior art of Kono and attributed functional capabilities to said art which are not disclosed or taught in said art.

It seems the examiner has set forth this misread reference as being relevant to said designated means and functional capabilities of the present invention, when in fact, said prior art is substantially not relevant to said capabilities of the present invention.

Attachments XX- XXII Re: Claim Rejections of No.6, 2nd Detailed Action:
the Prior Art of Huber & Leasure (U.S. Patent 1,186,786);
Re: Counter-response to the examiner's comments in Response to Arguments,
page 17, No. 17, regarding Huber & Leasure.

Please review the following visual/textual Attachments XX-XXII before proceeding with reading the above noted counter-response to comments by the examiner, which will follow said Attachments.

Attachment XX is an after fusion light-path diagram, done in color to demonstrate the functional capabilities required of the Huber & Leasure eyeglasses to view a typical stereograph and occlude the residual images of the "Three Picture Effect". The text that accompanies the diagram further explains the relevant aspects of this function, and also the limitations and constraints of this prior art in regard to what it actually discloses and teaches.

Attachment XXI is an after fusion light-path diagram, also done in color, to show the functional capabilities of the present invention, in regard to blending the peripheral fields with the central stereo field, with accompaning text. This diagram can be easily compared with the previous Attachment XX.

Attachment XXII is a diagram which shows the functional capabilities of the optics and adjustable occluding apertures of the present invention as compared with the functional capabilities of the lenses and shields disclosed by Huber & Leasure.

Attachment XX Prior Art of Huber & Leasure

Regarding No.6 of the 2nd Detailed Action, the examiner's citing of Huber & Leasure (U.S. Patent 1,186,786) as prior art that teaches the use of adjustable lenses and shields to facilitate interpupillary alignment of stereographic content, as the basis for rejection of the claims of the present invention.

After Fusion Light-Path Diagram: 19th Century Use of Shields to Occlude the "Three Picture Effect"; Re: Huber & Leasure.

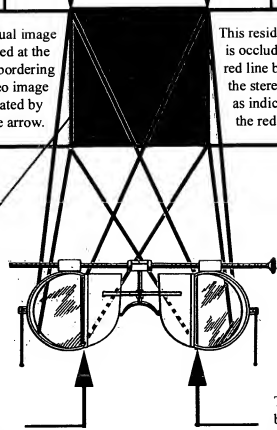
Purple arrows indicate the full field of view,
and the square purple field below is the fused stereograph.

The blue square area represents the residual **right-eye** viewpoint of the left stereo image field which after fusion, forms the **left** monocular image field of the "Three Picture Effect".

The red square area represents the residual **left-eye** viewpoint of the right stereo image field, which after fusion, forms the **right** monocular image field of the "Three Picture Effect".

This residual image is occluded at the blue line bordering the stereo image as indicated by the blue arrow.

This residual image is occluded at the red line bordering the stereo image as indicated by the red arrow.



This occlusion is typical of the devices of the era. The occluded edges are at the bordering, non-image edges of the fused stereo image, and no blending of peripheral content in the interior of the overall field being viewed is required.

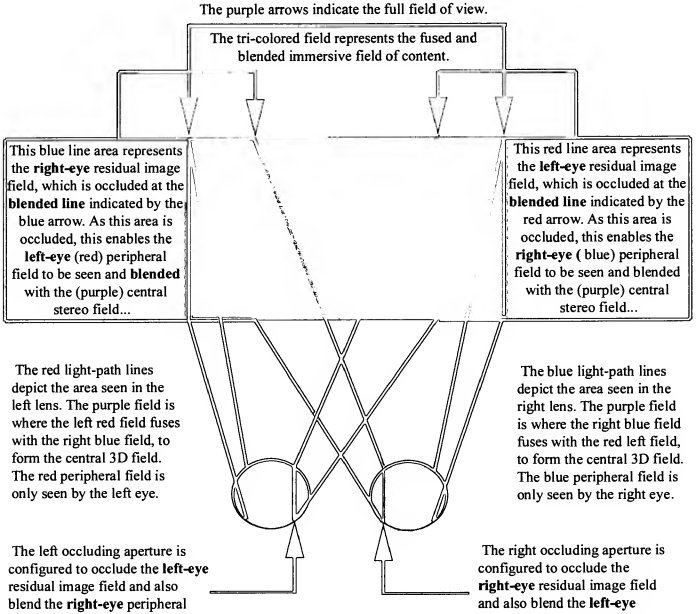
The red and blue light-path lines depict the respective left and right areas seen in the left and right lenses. As stated, the red and blue fields fuse to form the purple 3D field with no peripheral fields.

The left occluding shield blocks the **left-eye** residual image, which appears to the **right** of the fused 3D image. But the lenses and shields **are not** configured for blending peripheral fields, or viewing immersive content.

The right occluding shield blocks the **right-eye** residual image, which appears to the **left** of the fused 3D field.

Attachment XXI (Re: Claim Rejections of No.6, 2nd Detailed Action)

After Fusion Light-Path Diagram: Blending Peripheral Fields With the Central Stereo Field; Re: the Present Invention.



The process of blending the Peripheral Fields with the Central Stereo Field is designated in the Specification of the present invention. See Description of the Invention, Stereoscopic Viewer, page 2, line 29- page 3, line25; Figures 7-9, and the written description, specifically, page 10, lines 25-32.

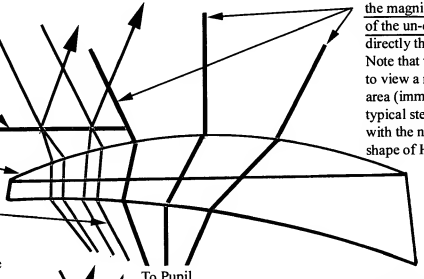
The top diagram shows the light path trajectory that occurs with an occluding aperture and lens of the present invention, in this instance with an aperture that is separate or separately adjustable from the lens; the aperture is a thin plastic membrane that occludes specific image light, but allows diffused light reflected from the overall tone of the content surface to pass through to the lens and pupil.

These two factors enable the occluding aperture to seamlessly blend fields: the close proxcimity of the aperture to the pupil, and the passage of subtle diffused light through the aperture that conveys a soft blur to the pupil.

The adjustable occluding aperture membrane is slidable; positioned to closely overlap the lens.

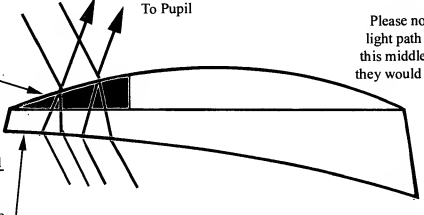
At no point in the range of adjustment does it not overlap the lens, so edge distortion from the lens cannot affect the even diffusion of the light that creates the soft blur that blends the fields. Lens/aperture overlap can be seen in Figures 1,5,7,10,21,22, 24, and 26-39.

The three thick lines indicate the magnification and bending of the un-occluded light passing directly through the lens. Note that the lens is designed to view a much larger content area (immersive) than the typical stereograph. Compare with the non-immersive lens shape of Huber & Leasure.

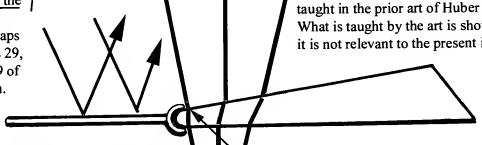


Please note the un-occluded light path lines are omitted in this middle diagram for clarity; they would be the same as above.

The middle diagram depicts a lens and occluding aperture molded in one piece, which simply means the aperture is a molded texture on the surface of the lens. It can be on the outer convex surface as shown here, or on the concave surface of the lens. It still overlaps the lens. See Figures 29, 32, 36, 37, 38 and 39 of the present invention.



None of these capabilities shown above are taught in the prior art of Huber & Leasure. What is taught by the art is shown below, and it is not relevant to the present invention.



Huber & Leasure claim and teach the utilization of lenses (flat prism wedge lenses that bend light but do not magnify it) with **opaque** metal shields that use "C" channels to frame and clamp the apex of each prism wedge (see Figure 2, Huber & Leasure). As claimed, the shields are "**disposed inwardly**"of the lenses, i.e., **abut** the lenses at the very edge that is used for occlusion.

This means that light can be distorted at this edge where the lens and the shield join, which isn't crucial for this device, since it had no visual fields to blend in1916. The shields are for blocking the "Three Picture Effect", and do not overlap the lenses to avoid edge distortion; are opaque, and do not diffuse light to create a soft blur.

Counter-Response to the Examiner's Remarks in the 2nd Detailed Action;

see Response to Arguments, page 17, No.17, lines 9&10:

> " The examiner must point out that Huber and Leasure (Huber et al.) is used solely for the teaching of interocular adjustment."

As was stated in Attachment VII of the 1st Response, the lenses and shields of Huber & Leasure are not configured to perform, and do not disclose or teach the functional capability of interocular adjustment as designated in the present invention.

The question is not just about what is taught about a particular means utilized to move and adjust the disclosed lenses and shields; in this instance, a screw-type mechanism, but it's also about exactly *what* is being moved and adjusted, i.e., the specific functional capabilities of the eyepiece itself (the **ocular** of the term "interocular adjustment"), in this instance, the lenses and shields, and finally, the reason *why* these means are being moved and adjusted, i.e., the primary objective of the functional capability.

As will be demonstrated in Attachment XXVII regarding the cited prior art of Inaba, the screw-type adjustment mechanism is well known, and if one goes beyond the field of stereoscopic devices, this mechanism is utilized in many mechanical applications.

As is demonstrated in the Attachments XX- XXII, the lenses and shields of Huber & Leasure are moveable and adjustable, but they **do not teach the necessary configurations** required to seamlessly blend left and right peripheral fields with a central stereo field to enable the perception of **immersive content**, as designated in the present invention and required in Claim 22. If the lenses and shields of Huber & Leasure were required to perform this function, **they would fail**.

The examiner has consistently failed to consider the functional requirement of the blending of said fields as designated in the written description and Figures of the present invention, as required in Claim 22.

The examiner states in the Response to Arguments, page 17, No.17:

> "In response to applicant's argument that the present invention does not utilize any threaded, screw-type interoccular adjustment means like Huber et al. does, the examiner must point out that some of the claims, such as claim 22, **only require** the lenses and occluding apertures to be adjustable. Since the lenses and occluding apertures of Huber et al. most certainly are adjustable, Huber et al. reads on that limitation."

In counter-response, it must be stated that Claim 22 **does not only require** the lenses and occluding apertures to be adjustable.

Claim 22 requires said lenses and occluding apertures to be **handheld**. This functional capability is required of the viewer in Claim 22, which is configured **with** said lenses and apertures. Figure 10 of the present invention illustrates the viewer being handheld, and the Specification of the present invention clearly designates the functional requirements necessary to enable this, including the need for an exterior housing , i.e. a "viewer body", which allows the **internal movement** of the lenses and apertures to take place while the viewer body is being handheld in a stable position during adjustment and viewing. The **eyeglasses** of Huber & Leasure teach away from this designated requirement.

Claim 22 does not only require that said lenses and adjustable apertures be handheld, it also requires that they are configured to enable the perception of **immersive content** as designated in the present invention. The examiner has failed to consider the interconnected functional relationship of said lenses and occluding apertures in the viewer, with the content support portion, and with the viewer pivotal chassis, **all of which are required** in Claim 22 to maintain a precise and absolutely necessary alignment with said designated fields of content, in order to enable the lenses and occluding apertures to be adjustable within the parameters of an **optically stable platform**, so they **blend said fields together properly** and optically convey the immersive content.

Attachment XXIII & XXIV Re: The Claim Rejections of No.7, 2nd Detailed Action: the Prior Art of Jones (U.S. Patent 5,499,136).

Please review the following Attachments XXIII & XXIV before proceeding with reading the response regarding the examiner's citing of the prior art of Jones.

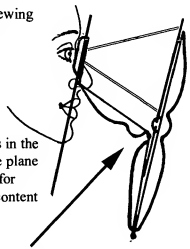
Attachment XXIII is a diagram of the pivotal movement of the embodiment cited by the examiner in No.7 of the 2nd Detailed Action. Said diagram illustrates how the designated "Viewer Pivotal Array" of this embodiment was never configured to enable the content of two spread pages to be conveyable via a scanning movement while maintaining focus. The examiner has misread the prior art of Jones (who is the same inventor of the present invention) and incorrectly attributed this functional capability to this prior art. As stated in the **application of the present invention**, in the section designated Description of the Invention, under Chassis Pivotal Geometries , page 3, line 28 - page 5, line 10, the applicant explains the **substantial differences** of the viewer pivotal chassis of the present invention as compared to the previous art of the viewer pivotal array in the prior art of U.S. Patent 5,499,136, and the reasons for the required innovations to the pivotal geometry of said viewer pivotal chassis, which is configured to enable the viewer convey the content via scanning while maintaining focus.

Attachment XXIV presents a *hypothetical* situation whereby the viewer pivotal array of the prior art is **incorrectly positioned** in an attempt to enable the viewer to convey the content with a scanning motion while maintaining focus. The resulting optical problems that are shown to occur are due to the geometric placement of a mid-point pivot, which pushes the chassis against the user's lower face, and causes the user's eyes to move away from the lenses, which in turn decreases the perceivable cone of vision through the lenses. Attachment XXIV also presents a diagram which demonstrates the scanning capability of the pivotal geometry of the viewer pivotal chassis of the present invention.

Pivotal movement of the Viewer Pivotal Array as embodied in Jones,Patent 5,499,136. Shown here is the sequence of movement which enables the user to shift from the designated "1st Viewing Position" to the "2nd Viewing Position."

The lens-to-image plane is the plane which the viewer occupies when conveying sharply focused content to the user. The distance of the plane from the content can vary, depicted here is the embodiment being used by a person with good near-object vision.

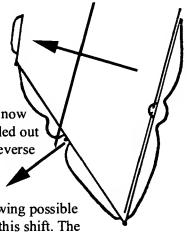
1. First Viewing Position



The viewer is in the lens-to-image plane (purple line) for viewing the content on top page.

Note that this angle apex of the the middle pivot is inverse, and that this gives room for the user's lower face.

2. Shifting position.

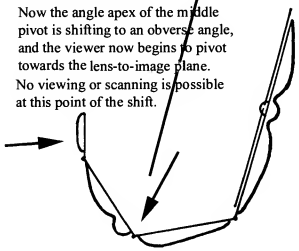


The chassis now must be pulled out straight to reverse the apex.

No viewing possible during this shift. The viewer is pulled out of the lens-to-image plane.

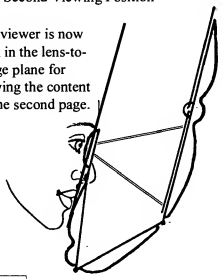
3. Shifting to obverse

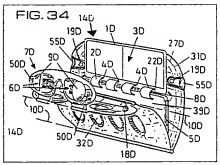
Now the angle apex of the middle pivot is shifting to an obverse angle, and the viewer now begins to pivot towards the lens-to-image plane. No viewing or scanning is possible at this point of the shift.

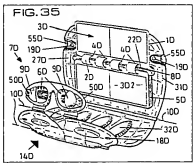


4. Second Viewing Position

The viewer is now back in the lens-to-image plane for viewing the content on the second page.





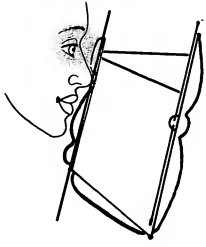


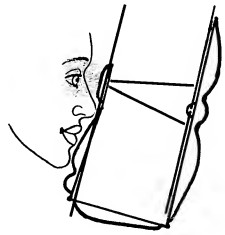
The First and Second Viewing Positions are clearly described in the patent's Specification. No optical conveyance of content via scanning between these two positions is possible, as the next page illustrates.

Attachment XXIV [redacted]nning Capability Diagrams (Re: Claim [redacted]jections of No.7)

If the chassis of the embodiment from patent 5,499,136 is positioned incorrectly in an attempt to enable a scanning motion while keeping the viewer in the lens-to-image plane, the chassis section below the viewer pushes against the user's lower face, and thus, the user cannot get their pupils close enough to the lenses (see yellow area below) to see the content, because the cone of vision is greatly reduced. This problem also effects the ability of the occluding apertures to blend the peripheral and central fields properly.

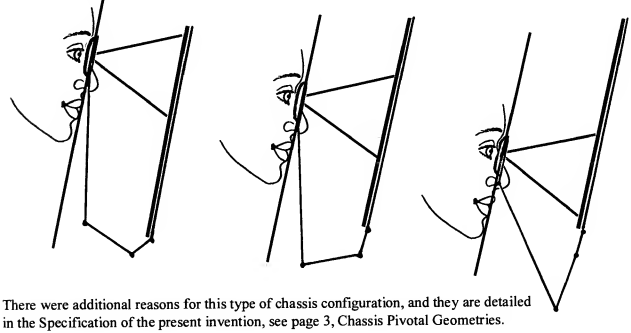
The pivotal geometry of this chassis was never designed to enable the viewer to optically convey two spread pages of content with the function of scanning while maintaining focus.





The examiner has misread the prior art of Jones (the said same inventor of the present invention), and mis-attributed to said art the functional capability of the viewer being able to optically convey the content of two spread pages by visually scanning up and down said content while maintaining focus. As shown here, the content **cannot** be adequately conveyed due to the geometry of said prior art chassis.

The Viewer Pivotal Chassis of the present invention is expressly configured to enable the viewer to scan up and down a length of content while maintaining focus. The pivotal geometry of the chassis enables this operation to be achieved in one scanning motion, and the user's eyes are correctly positioned in close proximity to the lenses throughout the scan, as shown here.



There were additional reasons for this type of chassis configuration, and they are detailed in the Specification of the present invention, see page 3, Chassis Pivotal Geometries.

In Further Regard to the Examiner's Citing of the Prior Art of Jones

In the 2nd Detailed Action, No.7, page 9, the examiner states that the applicant's own prior art discloses the means which enable the content on two spread pages to be optically conveyable with the viewer by visually scanning while maintaining focus. The examiner cites Figures 34 & 35, and column 22, lines 23-20????) as referring to this capability. The cited Figures and lines **do not in anyway state or refer to the functional capability of scanning**.

The applicant can state with personal authority that said cited means is capable of pivoting to what is designated as **a first and a second viewing position** (see column 11, lines 25-67, and all of column 12, and Figures 29, 30, 34, & 35 of U.S. Patent 5,499,136), which enables the means of the device to be positioned to view two spread pages, but only after the viewer pivotal array is *pivoted, repositioned and refocused* for each page. In other words, the viewer can not optically convey content while *moving between* or *scanning* the first and second viewing positions. Simply put, the functional capability of scanning content with the viewer wasn't really contemplated by the applicant in the timeframe that the stereographic book of said prior art was created. This idea came later, and was one of the factors that led the applicant to work towards the present invention.

Attachment XXV Re: The Claim Rejection of No.8, 2nd Detailed Action:
the **Prior Art of Curtain** (U.S. Patent 5,000,543) No additional material included.

The examiner cites Figure 15 of Curtain as disclosing two photographic stereographic pairs of content, 96 & 98, being placed **back to back** and slidably inserted into transparent sleeves. Said pairs are not placed **back to back** in Figure 15; the examiner has either misread the art, or the term "back to back", and should perhaps study the stance of duelists at the beginning of a duel with pistols to discover the traditional spacial arrangement defined by the term.

Attachment XXVI Re: The Rejections of No.10, 2nd Detailed Action:
the Prior Art of Stevens (U.S. Patent 262, 846);
Re: *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Please review the visual/textual Attachment XXVI before proceeding with reading the response regarding the examiner's citing of *Howard v.Detroit Stove Works*, 150 U.S 164 (1893)

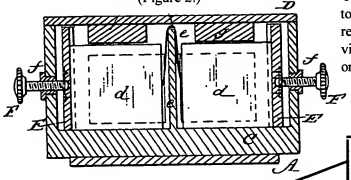
Attachment XXVI demonstrates the functional capabilities and constraints of the adjustable lenses and flaps of said prior art; and compares these with the capabilities of the present invention. The examiner has misread said prior art and attributed functional capabilities to said prior art that are far beyond the actual capabilities of said art.

The response to the examiner's citing of *Howard v. Detroit Stove Works* et al. in Nos.10 &12 of the 2nd Detailed Action follows after said Attachment.

Attachment XXVI Prior Art of Stevens

Regarding Claim Rejections of No.10, 2nd Detailed Action, the examiner's citing of Stevens (U.S. Patent 262,846) as prior art that teaches independently adjustable lenses and occluding apertures. The examiner has failed to consider the functional constraints of Stevens, and the distinctively different functional capabilities required by the present invention.

(Figure 2.)

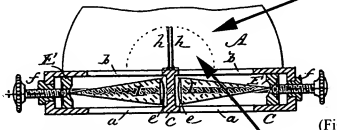


Flaps "h" are not configured to be **gradually adjustable** in relation to the lenses while viewing immersive content, or any content for that matter.

The Stevens viewer is a box with a lid to enable various types of prisms and lenses to be inserted.

Note there is no place for one's nose, the optics almost abut together. Therefore, the optics cannot be positioned closely to the pupils, which greatly reduces the cone of vision. This factor alone makes this device incapable of conveying immersive content as required by Claim 22.

The flaps "h" have **two** positions of adjustment, (see column 2, title page, lines 83-88, Stevens) this is one of them, called "folded together"- Stevens

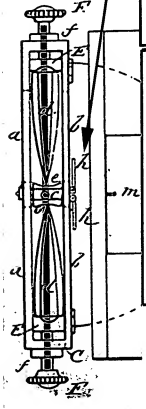


(Figure 3., a Top View)

This is the other position (called "pressed flat"- Stevens) of flaps "h". Note that the flaps **do not slide** in a plane parallel to the plane common to the lenses, as do the occluding apertures of the present invention.

Note that flaps "h" ***pivot*** on axes that are in a plane that is parallel to the plane common to the left and right lenses (blue line); and that they swing out **away** from the lenses. The occluding edges of the flaps cannot be placed in a consistant close proxcimity with the lenses for the blending of the visual fields. This factor alone makes flaps "h" **totally unsuitable** to enable a soft blur of occlusion to be consistant enough to blend fields together as is required by the present invention.

(Figure 4., a Top View)



The functional positions of flaps "h" are noted on page 2, column 1, lines 13-21, **for viewing standard stereographs**; page 2, column 1, lines 39-64 **for viewing reverse perspective**; page 2, column 1, line 65, column 2, lines 66-78, **for viewing stereographs directly without lenses in the box**; page 2, column 2, lines 79-101, **to view two alike *non-stereo* pictures in psuedo-3D by turning them at angles in relation to the axes of the lenses.**

The examiner has misread the Stevens art, and attributed capabilities to the art that do not exist. None of the means utilized by the Stevens device teach anything of relevance with regard to the present invention.

As was stated in Attachment VII of the 1st Response, these types of septum devices were designed to block the user's perception of the "Three Picture Effect" and **do not disclose or teach** the functional capability of precisely blending three fields of content together to create an overall immersive field. **It is impossible** for the lenses and flaps of the Stevens device to do this, no matter how they are adjusted.

Regarding the Examiner's Citing of *Howard v. Detroit Stove Works* et al.:

The examiner has taken the **liberty** of changing the terms of the finding: the term **cast** has been replaced with the term **formed**; and the term **cast** is used in a very specific **context** in the finding, regarding the identical modes of manufacture and also use of an identical, suitable material: **iron**. The examiner has also failed to consider the exactly similar spacial positioning of the functional elements in the Monumental Grate and the infringing Beckwith Grate, and the fact that the only actual differences were the general adaptive shapes (Monumental a rectangle, Beckwith a circle) needed to fit into each corresponding fire-pot, and the Monumental Grate was cast in **two** pieces, whereas, the Beckwith Grate was integral. The number **two** seems to allow the examiner to deem that only **routine** skill in the art is required to integrate **any number** of differently functioning elements, for example, the device depicted in Figure 36 of the present invention, (which the examiner also rejects, in part with this finding) features an integrated ocular piece, (3J and/or 3K) which merges a lens, an occluding aperture, a linear gear, an adjustment switch, and the various guide edges and surfaces needed to enable the piece to slide and also stop in exactly the correct manner in the housing of the viewer body. That's at least **five** integrated elements, and it did require **reasonable** skill to configure an ocular piece that is very effective in its compact use of space, relative low cost in regard to tooling, use of material, ease and speed of component assembly; and in terms of operation, durability and friendliness to the user.

It is the applicant's opinion that the examiner uses said finding with far too much latitude when considering the functional aspects of the prior art of Stevens and also Frantz & Joseph (No.12, 2nd Detailed Action) with comparative regard towards the present invention. There are too many substantial differences between said prior art and the present invention in the aspects of functional performance, geometric positioning of elements, modes of operation and primary objectives to utilize said finding in a proper context that would obtain the actual relevance and weight the examiner has attributed to it.

Attachments XXVII & XXVIII Re: Rejections of No.11, 2nd Detailed Action:
the Prior Art of Inaba (U.S. Patent 5,701,532)

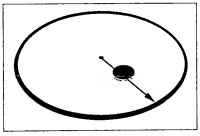
Please review the following Attachments XXVII & XXVIII, which constitute the entire and specific response regarding the examiner's citing of the prior art of Inaba.

After reviewing of the above noted Attachments, please review the following Attachments:

Attachments XXVIX - XXXI Re: Rejections of No.12, 2nd Detailed Action:
the Prior Art of Frantz & Joseph (U.S. Patent 3,597,041)

The following Attachments XXVIX - XXXI constitute the entire and specific response regarding the examiner's citing of the prior art of Frantz & Joseph.

A lesson in Geometry for the examiner : imagine a red circle drawn on a surface of ice. Imagine a hockey puck sliding from the center point of the circle to the perimeter of the circle. This is **Sliding Radially**:

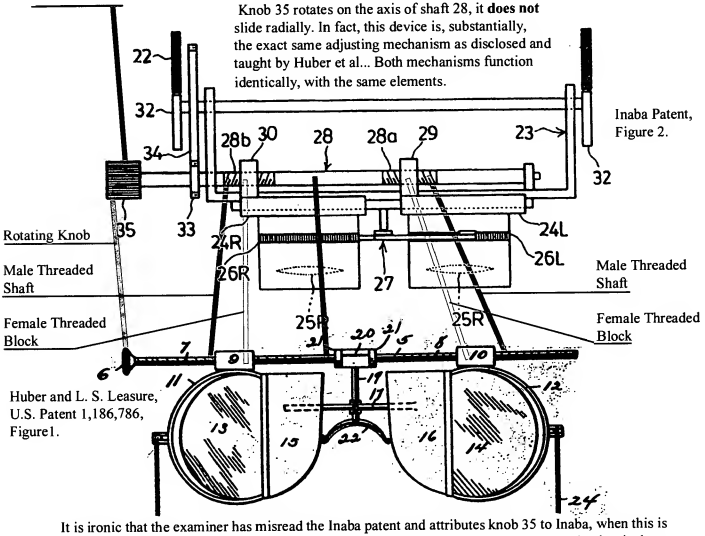


Note: it seems the examiner failed to look at the Figure 2 Top View in the Inaba patent which reveals the means of adjustment clearly, and also failed to note Figure 2 in the Detailed Action, and stressed that Figure 1 be seen.

In the 2nd Detailed Action, No.11, page 13, line 16, the examiner incorrectly attributes a radial sliding motion to knob 35, shown in the Inaba interocular adjustment device (U.S. Patent 5,701,532.)

As shown here, from Figure 2.

Knob 35 rotates on the axis of shaft 28, it **does not** slide radially. In fact, this device is, substantially, the exact same adjusting mechanism as disclosed and taught by Huber et al... Both mechanisms function identically, with the same elements.



It is ironic that the examiner has misread the Inaba patent and attributes knob 35 to Inaba, when this is actually part of a "known" pre-existing camera which Inaba is seeking to improve. It's also ironic that the examiner fails to see the exact functional similarities of this camera's interocular adjustment device and the Huber et al. device. On page 13, it seems the examiner does not recognize said device as being the same as Huber et al., and instead is citing Inaba as a reference that teaches the function of a "sliding adjustment switch" with knob 35, as disclosed in Figures 29, 36-38 and required in Claims 34-36 of the present invention, which all slide in a linear direction. As shown above in Inaba Figure 2, turning knob 35 rotates threaded shaft 28. In Figure 1, Huber et al., turning knob 6 rotates shaft 5. They are alike. The examiner has misread said Figures and attributed functional capabilities to the reference that are not disclosed or taught therein. The examiner has also misread Figure 4 of the Inaba patent, as shown in the next Attachment.

Attachment XXVIII Prior Art of Inaba (Re: Claim Rejections of No.11)

In considering Claims 34 and 35 of the present invention, on pages 13 and 14 of the 2nd Detailed Action, the examiner combines the misread, non-existing functional capability of "sliding" knob 35 with the pivotal arm mechanism disclosed by Inaba in Figures 1 and 4 of U.S. Patent 5,701,532, and subsequently misreads the geometric underpinnings of Figure 4, and wrongly attributes this mechanism with the function of enabling interocular adjustment by moving the left and right optical means towards and away from each other with synchronized equidistant movement, as required in Figures 34 and 35 of the present invention.

The Inaba device, as shown here, **does not move said means or any means towards or away from each other.** Figures 1 and 4 discloses and teaches a pivotal arm that **rotates** the stop mechanism of each camera lens in a synchronized motion.

This is clearly demonstrated in Figure 4, which indicates with arrows the direction of rotation of the arm and the lens stop rings, which can be seen more clearly in the Top View of Figure 2 in the preceding Attachment.

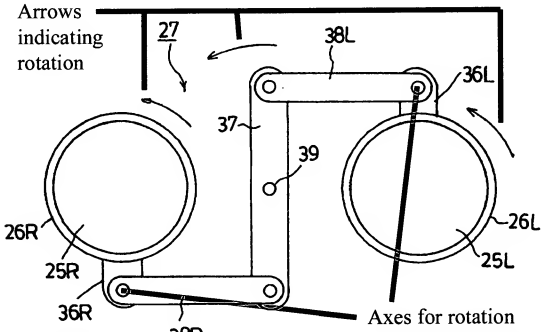


FIG 4

In addition, said function of this mechanism is clearly designated in column 4, lines 64-68, and column 5, lines 1-40 of the Inaba patent.

Further, it should be noted that said function of rotation is clearly taught herewith the placement of pivotal axes located at 36R and 36L, and said rotation requires the five axes as shown, whereas the present invention requires in Claim 35 only three pivotal axes to achieve the required function of **interocular adjustment**.

It is evident, as clearly demonstrated herewith, that the examiner has misread said Figures of the Inaba patent, and seems to have not read the pertinent designative text included therewith said Figures.

The examiner is incorrect and has attributed functional capabilities to the Inaba device that are not disclosed or taught in the Inaba patent.

The functional capability and mode of operation for the pivotal arm, interocular adjustment means of the present invention are detailed in Figures 33-35 & 38 & 39, and also in the corresponding written description of said figures.

Attachment XXIX Prior Art of Frantz & Joseph

Regarding the Claim Rejection of No.12, of the 2nd Detailed Action,

whereby the Prior Art of Frantz & Joseph (U.S. Patent 3,597,041) is cited as teaching the use of a pinion gear and opposing linear gears for interocular adjustment, the pinion gear having a rotational axis that is **perpendicular** to a plane that is common to the left and right lenses.

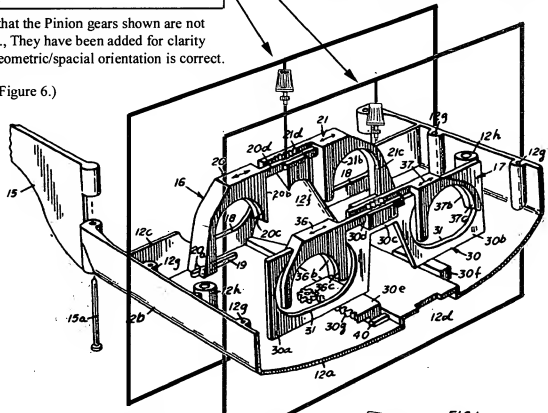
The Frantz & Joseph art discloses a **headmounted** binocular device to aid people with impaired vision. It has **two pairs** of **prescription** lenses, **each** pair having a pinion gear and corresponding linear gears to enable interocular adjustment, respectively.

As can be seen here, the rotational axis of each respective pinion gear exists in a plane that is **common, not perpendicular** to the same plane that is common to the left and right lens of each respective pair of lenses.

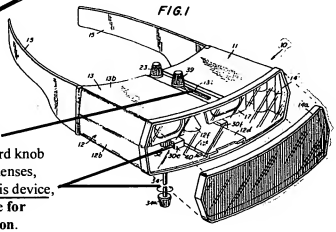
Note the position of the rotating adjustment knobs; they directly turn each pinion gear, which has an integral shaft. The knobs have a **central** position, over the bridge of the nose, which is fine for a **headmounted**, hands free device, but unsuitable for a handheld device, such as the present invention, which requires a switch that is positioned on one or both sides so it can be easily manipulated by the same hand that is holding the device. Also, the top/center switch location is unsuitable if the viewer is to be folded up into a storage mode.

It is noted that the Pinion gears shown are not in Figure 6., They have been added for clarity and their geometric/spacial orientation is correct.

(Figure 6.)



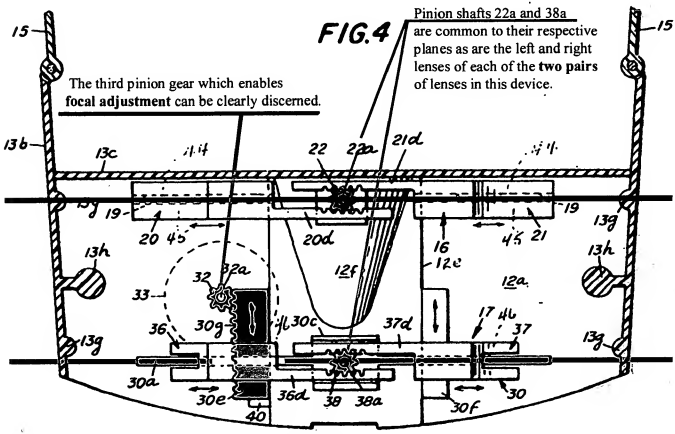
In No. 12, the examiner forgot that Claim 36 was dependant on Claim 34, which requires at least one sliding adjustment switch to facilitate rapid and precise interocular adjustment of the merged lenses and occluding apertures.



Note that the Frantz & Joseph device has a "sliding switch" and it is the forward pinion gear knob, which slides in **slot 13i**, but the sliding capability is **passive**, to allow the forward knob to move during the focal adjustment of the forward pair of lenses, which is enabled by the **third** pinion/rack gear system in this device, which is for **focusing**. So the "sliding switch" does not slide **for** interocular adjustment, but **during** adjustment of **focalization**.

Attachment XXX Frantz & Joseph Prior Art (Re: Claim Rejection of No.12)

Shown here is Figure 4 of the Frantz & Joseph patent, as cited by the examiner. Figure 4 is a Top View; and the two planes (blue and pink) shown in the previous Attachment are now seen from an angle that clearly reveals how the left and right lenses of **each pair** are common to **each respective plane**, and the **pinion shaft** provided for **each respective pair of lenses** is also common to **each said same respective plane**. The shaft i.e., **the rotational axis of each respective pinion gear is not perpendicular to each said plane.**



In No.12, page 15, line 5, the examiner states it would have been obvious --- " to include a pinion gear meshed with first and second linear gears as Frantz et al. suggests in order to allow for interpupillar spacing of the lenses ***so there is always a visual path through the viewer*** (Frantz, column 1, lines 62-64)..."

The lines in the Frantz & Joseph patent the examiner cites **do not** pertain to "a pinion gear meshed with 1st & 2nd linear gears", the lines cited (in italics above) actually pertain to the "ovallike" shape of "**eye apertures 18**", which are simply the **eye holes** in the rear of viewer body:

It should be understood that Frantz et al. uses the term "aperture" in its most common definition, to describe a hole. The term "aperture", as used in the present invention with the term "occluding aperture", is used to define the functional capability of an aperture that works like an aperture in a camera, as a means to precisely control the passage of light.

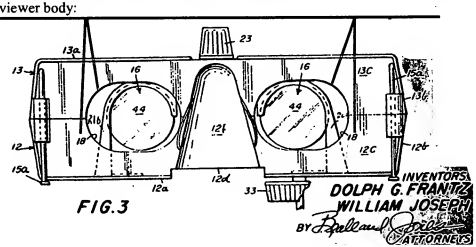


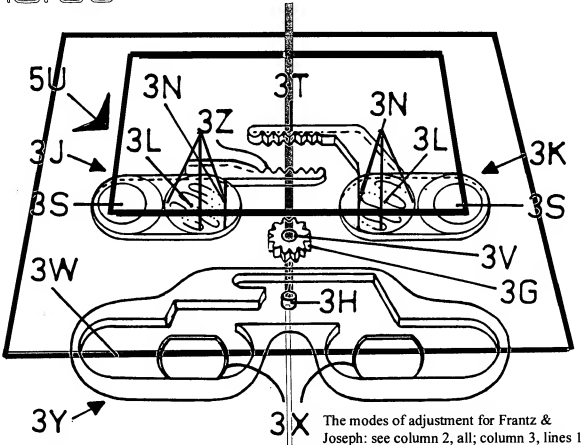
FIG.3

Attachment XXXI Geometry of Elements (Re: Claim Rejection of No.12)

Shown here is Figure 36 of present invention, which pertains to Claim 36. The Frantz & Joseph patent does not disclose or teach a device which uses a single large pinion gear meshed with two linear gears, with, as states Claim 36: "a rotational axis of said pinion gear being perpendicular to **a** plane that is common to the left and right lenses. There are at least three parallel planes that can be considered common in the traditional geometric definition: a plane (in green) that the disk-like bodies of the lenses share in space, which would be the most widely accepted definition of "a plane that is common" to the two lenses; however, two other planes that are common **optically** to the lenses is an image-to-lens plane (in orange), a plane in which the content is seen in focus, and the typical focal plane determined by the back focal length convergence point of the lenses (in purple)

If at least the additional reference plane of the focal plane of the Frantz & Joseph device is considered, the pinion gear shafts (i.e., axes) of the device would be **parallel** to said focal plane, **not perpendicular**.

FIG. 36



The modes of adjustment for Frantz & Joseph: see column 2, all; column 3, lines 1-27.

The modes of adjustment, the present invention: see Figures 36 & 37, page 17, lines 27-32, page 18, lines 1-24.

Comparison of operational modes:

In the present invention, the user slides either the left or right sliding switch 3S (the user can hold and adjust the device with either hand) which slides a linear gear, which rotates the pinion gear, which drives the other opposing linear gear, and thus, the lenses and occluding apertures move with synchronized equidistant motion towards or away from each other. There is no central rotating knob.

In the Frantz & Joseph device, the user's thumb and forefinger rotates the central knob, which turns the pinion gear, which drives the opposing linear gears and thus, the lenses move with synchronized equidistant motion towards or away from each other. There is no sliding switch, and the modes of adjustment are distinctively different, as are the components, the lenses, etc. that are being adjusted.

Closing Response Re: The Combined Teaching of the Prior Art Cited by the Examiner.

As demonstrated herein, the combined textual and visual references of the prior art cited by the examiner, if correctly and objectively reviewed, do not obviously teach the functional capabilities, geometric underpinnings and functional position of elements, specific modes of operation, and the stated primary objectives as written, drawn and designated in the Specification and claimed in the present invention.

Closing Counter-Response to the Examiner's Remark in **Response to Arguments**; No.17, Page 18, lines 1-3, 2nd Detailed Action:

> " Applicant's arguments with respect to references Rochwite and Merrick; the limitation of monocular fields; and the visual scanning of the two pages have been considered but are moot in view of the new ground(s) of rejection."

The defensive arguments regarding the above references and all the references and grounds responded to herein are **factually correct** and in corrective response to the factually **inaccurate** reading of the references and grounds that have been set forth by the examiner. When said cited references and grounds are accurately read, it becomes readily apparent that they are deprived of practical consideration and significance. Contrary to what is stated above, it is the misread references and "new grounds" set forth by the examiner **that are moot**, for if they had been correctly read in the first place, it is questionable that they would have been set forth as relative references. Unfortunately, the very real burden of response falls on the applicant.

In regard to the examiner's cabilities of consideration **during the past year**, these cabilities are clearly indicated in all the Actions initiated by the examiner , which contradict the two previously favorable reports issued by the Office.

The reports were requested by applicant in good faith and they were very positive and encouraging to the applicant and the investors in the present invention, who were influenced by the reports to move forward with the present invention, which is an entirely normal procedure, and one of the primary motivations the reports are requested from the Office.